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NEW YORK, NY 10151

EXAMINER

DENG, ANNA CHEN

ART UNIT	PAPER NUMBER
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2192

DATE MAILED: 06/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/052,797	SKARINGER ET AL.	
	Examiner	Art Unit	
	Anna Deng	2192	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 January 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 January 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>1/16/2002</u> . | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

1. This action is in response to the preliminary amendment filed on 1/16/2002.
2. Claim 17 has been amended.
3. Claims 18 – 19 have been added.
4. Claims 1 – 19 are pending and have been examined.

Drawings

5. The drawings are objected to under 37 CFR 1.83(a) because they fail to show text labeling of each items in Fig. 1 as described in the specification. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. For example, item 8 should be label as "preloader". MPEP § 608.02(d). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

6. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS: Figure 6(a) and Figure 6(b). Corrected drawing sheets in compliance

with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

7. The disclosure is objected to because of the following informalities: the drawings include the Figure 6(a) and Figure 6(b) are not mentioned in the DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS.

Appropriate correction is required.

8. The disclosure is objected to because of the following informalities: abbreviations should be spelled out before used. For example, on page 1, at line 10, "DSM-CC", on page 1, at line 21; "BIOP", and on page 1, at line 22, "DVB".

Appropriate correction is required.

Claim Objections

9. Claim 3 is objected to because of the following informalities: at line 1, abbreviation "MPEG" should be spelled out once in the claim. Appropriate correction is required.

10. Claim 13 is objected to because of the following informalities: at line 1, abbreviation "MHP" should be spelled out once in the claim. Appropriate correction is required.

Claim Rejections - 35 USC § 112

11. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

12. Claims 1 – 15, and 17 – 18 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

13. Per claim 1, at line 8, recites "a preloader operable simultaneously with the object loader for object parsing target object so as to determine all of the objects on which the target object depends, for downloading said objects", however, there is no written description for this limitation in the specification. In the specification on page 6, at lines 21 – 28, states "It first loads the class file that is to be requested by the class loader 2, and then performs class parsing on the class file in order to find out what other classes it will need" (emphasis added) which shows that claimed "operable simultaneously" limitation is in direct contradiction with the specification.

14. Per claim 4, at line 1 – 2, recites "the preloader is arranged to download different objects simultaneously form different respective section filters", however there is no written description for this limitation in the specification. In specification on page 6, at lines 27 – 28, states " the preloader 8 can keep a list of classes still to be downloaded. The preloader 8 may then perform asynchronous loading of all these classes" (emphasis added) which shows that claimed "download different objects simultaneously" limitation is in direct contradiction with the specification.

15. Per claims 5, at line 1 – 2, recites "the preloader is arranged to download a plurality of said objects simultaneously", however there is no written description for this limitation in the specification. In

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specification on page 6, at lines 27 – 28, states “the preloader 8 can keep a list of classes still to be downloaded. The preloader 8 may then perform asynchronous loading of all these classes” (emphasis added) which shows that claimed “download a plurality of said objects simultaneously” limitation is in direct contradiction with the specification.

16. Per claim 15, at line 8, recites “simultaneous with processing the target object, object parsing the target object so as to determine all of the objects on which the target object depends and downloading said objects”, however, there is no written description for this limitation in the specification. In the specification on page 6, at lines 21 – 28, states “It first loads the class file that is to be requested by the class loader 2, and then performs class parsing on the class file in order to find out what other classes it will need”, (emphasis added) which shows that claimed “simultaneously parsing the target so as to determine all of the objects on which the target object depends and downloading said objects” limitation is in direct contradiction with the specification.

17. Claims 2, 3, 6 – 14, and 17 are also rejected for being depended on rejected base claim 1. For compact prosecution, such claimed limitation “simultaneously” will be treated as – asynchronously – so as described on page 6 of the specification as cited above.

18. Claim 18 is also rejected for being depended on rejected base claim 15. For compact prosecution, such claimed limitation “simultaneously” will be treated as – asynchronously – so as described on page 6 of specification as cited above.

Claim Rejections - 35 USC § 102

19. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

20. Claims 1, 5 - 10, 12, and 15 - 19 are rejected under 35 U.S.C. 102(e) as being anticipated by Fowlow, US 6,260,078.

Per Claim 1 (as best understood):

The Fowlow patent discloses:

- A device for downloading application data from a distributed application environment (for example, see Abstract "A client enabled to load and run Java applets in a distributed object computing system retrieves needed Java classes in a location-independent manner from various class servers in the system")
- an object loader (NETWORK CLASS LOADER 304) for downloading objects (for example, see Figure 3, item 304 and associated text, also at col. 12, lines 48 – 50, states " The network class loader 304 is a mechanism that allows a Java client to load and define new classes at run time", Emphasis added)
- a controller (JAVA CLIENT 202) for requesting the object loader to download a target object, for processing the target object and, where necessary, for requesting the object loader to download another object on which the target object depends (for example, see Figure 3, JAVA CLIENT 202, NETWORK CLASS LOADER 304 and associated text, also at col. 12, lines 48 – 55, states " The network class loader 304 is a mechanism that allows a Java client to load and define new classes at run time. It also has functionality to allow classes to be resolved. If a downloaded class uses other classes that are not currently known or defined

within the Java client, these other classes must be found and loaded ("resolved"). The network class loader 304 is called to acquire these needed classes. The network class loader also emits requests from the Java client in response to a client request for particular Java code", Emphasis added)

- a preloader operable [simultaneously] asynchronously with the object loader for object parsing the target object so as to determine all of the objects on which the target object depends after download the target object, for downloading said objects and for storing said objects, such that said object loader can retrieve said another object from the preloader when request to download said another object (For example, see Figure 4, steps 414, 416, 418 and associated text, also at col. 13, lines 46 – 67, states "At this point, because the recently loaded class may use other classes, the Java interpreter must resolve any undefined class references. For example, if the retrieved execution code of the class indicated that other classes are used and these classes are not currently defined within the Java interpreter, then the execution code for these undefined class name must also be retrieved from classes servers ... Step 416 tests whether there are any unresolved classes remaining within the Java interpreter... However, if there are one or more unresolved classes, the in step 418 the Java interpreter asks the NCL for the execution code of a first unresolved class. From step 418 the procedure loops back to step 408 in which the NCL requests from the class server the appropriate class execution code", Emphasis added).

Per Claim 5 (as best understood):

The Fowlow patent discloses:

- the preloader is arranged to download a plurality of said objects [simultaneously] asynchronously (see Figure 3, NETWORK CLASSLOADER 304, col. 12, lines 54 – 55).

Per Claim 6:

The Fowlow patent discloses:

- the perloader additionally object parses each of said objects so as to determine further objects on which said objects depend, downloads said further objects and stores said further objects (see Figure 3, NETWORK CLASS LOADER 304, also at col. 12, lines 48 – 52; Figure 6, Primary Storage 106, also at col.15, lines 36 – 37, and col. 15, lines 40 – 44).

Per Claim 7:

The Fowlow patent discloses:

- a receiver memory in which the preloader stores downloaded objects (see Figure 6, Primary Storage 106,, also at col. 15, lines 36 – 37, and col. 15, liens 40 - 44).

Per Claim 8:

The Fowlow patent discloses:

- the objects include Java classes (See Figure 2, JAVA CLIENT 202, java class files 209 and 211, also col. 11, lines 22 – 25).

Per Claim 9:

The Fowlow patent discloses:

- the object loader is a sequential Java class loader (See Figure 4, steps 408 – 418, also at col. 13, lines 61 – 67) .

Per Claim 10:

The Fowlow patent discloses:

- the preloader conducts class parsing of a loaded class file (see col. 12, lines 48 – 51).

Per Claim 12:

The Fowlow patent discloses:

- the objects are provided together as part of modules (see Figure 3, ORB BINDIMG 302, also at col. 12, Lines 27 – 33)
- when the object loader or preloader downloads an object, the entire module for that object is stored in memory (see Figure 6, Primary Storage 106, also at col. 15, lines 36 – 37, and col. 15, lines 40 - 44).

Per Claim 15 (as best understood) and 16:

These are method versions of the claimed device discussed above (claim 1), wherein all claim limitations also have been addressed and/or covered in cited areas as set forth above. Thus accordingly, these claims are also anticipated by Fowlow.

Per Claim 17:

The Fowlow patent discloses:

- A computer readable storage medium having recorded thereon code components that, when loaded on a computer and executed, will cause that computer to operate according to claim 1 (see Figure 6, Primary Storage 104 and 106, Mass Storage 108, CD-ROM 114 and the associated text, also at col. 15, lines 33 – 55).

Per Claim 18:

The Fowlow patent discloses:

- A computer readable storage medium having recorded thereon code components that, when loaded on a computer and executed, will cause that computer to operate according to claim 15 (see Figure 6, Primary Storage 104 and 106, Mass Storage 108, CD-ROM 114 and the associated text, also at col. 15, lines 33 – 55).

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Per Claim 19:

The Fowlow patent discloses:

- A computer readable storage medium having recorded thereon code components that, when loaded on a computer and executed, will cause that computer to operate according to claim 16 (see Figure 6, Primary Storage 104 and 106, Mass Storage 108, CD-ROM 114 and the associated text, also at col. 15, lines 33 – 55).

Claim Rejections - 35 USC § 103

21. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

22. Claims 2, 3, 4, 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fowlow, US 6,260,078, as applied in claim 1 above, in view of Cochon et al US 5,835,591 (hereinafter Cochon).

Per Claim 2:

Fowlow teaches a device including a filter, each for filtering out, from a received transport stream (see Figure 1a, FILTER 40, also at col. 6, lines 5 – 8, as being used for filtering out the compress data to and from an object), Fowlow does not explicitly teach a plurality of section filters, sections relating to a respective requested object. However, Cochon teaches a plurality of section filters, sections relating to a respective requested object (see MPEG2 section layers, at col. 1, lines 9 – 15, col. 1, 46 – 60, col. 10, lines 1 – 2, and col. 10, lines 30 – 51).

It would have been obvious to one having ordinary skill in the computer art at the time of the invention was made to modify the device disclosed by Fowlow to include a plurality of section filters,

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sections relating to a respective requested object using the teaching of Cochon. The modification would be obvious because one of ordinary skill in the art would be motivated to analyze several layers of the requested data/object (such as MPEG2 type) more efficiently (Cochon, see col. 1, lines 9 – 16).

Per Claim 3:

Fowlow teaches a filter (See Figure 1a, FILTER 40, also at col. 6, lines 5 – 8), Fowlow does not explicitly teach filters are MPEG section filters. Cochon teaches filters are MPEG section filters (see col. 1, lines 46 – 60, col. 10, lines 1 – 2, and col. 10, lines 30 - 51).

It would have been obvious to one having ordinary skill in the computer art at the time of the invention was made to modify the device disclosed by Fowlow to include the filters are MPEG section filters using the teaching of Cochon. The modification would be obvious because one of ordinary skill in the art would be motivated to analyze the several layers of the data more efficiently (Cochon, see col. 1, lines 9 – 16).

Per Claim 4 (as best understood):

Fowlow teaches filters, each for filtering out, from a received transport stream (See Figure 1a, FILTER 40, also at col. 6, lines 5 – 8). Fowlow does not explicitly teach the preloader is arranged to download different objects [simultaneously] asynchronously from different respective section filters. Cochon teaches the preloader is arranged to download different objects from different respective section filters (see col. 1, lines 21 – 40).

It would have been obvious to one having ordinary skill in the computer art at the time of the invention was made to modify the device disclosed by Fowlow to include the preloader is arranged to download differ objects from different respective section filters using the teaching of Cochon. The modification would be obvious because one of ordinary skill in the art would be motivated to download the different objects more efficiently (Cochon, see col. 1, lines 9 – 16).

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Per Claim 13:

Fowlow teaches a device for downloading application data from a distributed application environment (see Abstract), Fowlow does not explicitly teach a device which is MHP compliant. Cochon teaches a device which is MHP compliant (see MPEG2: ISO/IEC 13818 standard, at col. 2, 35 – 37)

It would have been obvious to one having ordinary skill in the computer art at the time of the invention was made to modify the device disclosed by Fowlow to include a device which is MHP compliant using the teaching of Cochon. The modification would be obvious because one of ordinary skill in the art would be motivated to use a flexible demultiplexing device (Cochon, see col. 1, lines 9 – 16).

Per Claim 14:

Fowlow teaches a device for downloading application data from a distributed application environment (see Abstract), Fowlow does not explicitly teach a device is a television device. Cochon teaches a device is a television device (see Abstract, and col. 1, 61 – 63).

It would have been obvious to one having ordinary skill in the computer art at the time of the invention was made to modify the device disclosed by Fowlow to include a device is a television device using the teaching of Cochon. The modification would be obvious because one of ordinary skill in the art would be motivated to enable a system with a large number of channels that can be multiplexed (Cochon, see col. 1, lines 9 – 14).

23. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fowlow, US 6,260,078, as applied in claim 1 above, in view of Swaminathan et al US 6,092,120 (hereinafter Swaminathan).

Per Claim 11:

Fowlow teaches a memory for storing a file for each previously downloaded target object (see Figure 6, item 106, also at col. 15, lines 36 – 37, and col. 15, lines 40 – 44); the preloader downloads the objects identified in the file first (see col. 13, lines 60 – 62), Fowlow does not explicitly teach the file containing a list of the objects on which the target object depends which require the most time to

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download, Swaminathan teaches the file containing a list of the objects on which the target object depends which require the most time to download (col. 11, lines 52 – 56, col. 11, lines 58 – 59, col. 12, lines 41 – 44).

It would have been obvious to one having ordinary skill in the computer art at the time of the invention was made to modify the device disclosed by Fowlow to include the file containing a list of the objects on which the target object depends which require the most time to download using the teaching of Swaminathan. The modification would be obvious because one of ordinary skill in the art would be motivated to ensure timely delivery of class files (Swaminathan, see col. 1, lines 43 – 51).

Conclusion

24. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anna Deng whose telephone number is 571-272-5989. The examiner can normally be reached on Monday to Friday 9 AM - 6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Dam can be reached on 571-272-3695. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AD



**TUAN DAM
SUPERVISORY PATENT EXAMINER**